

request for prescribed data. The web server is coupled to the billing server. The web server provides the telecommunication transaction information to the billing server, and requests the prescribed data in response to a user command via the thin web client interface, and provides the prescribed data to the user. The prescribed data distinguishes
5 between a first telecommunication transaction record and a second telecommunication transaction record.

An advantage of the present invention is that a money manager can access the details online that are needed to properly analyze and reconcile communications charges.

Another object of the present invention is to provide an apparatus that gives a subscriber
10 the ability to access telecommunications charges for his/her account that have been entered since a previous consolidated bill was issued.

In another aspect, it is a feature of the present invention to provide an interactive telecommunications billing mechanism. The interactive telecommunications billing mechanism has a billing server and a web server. The billing server maintains a
15 transaction data base, and queries the transaction data base to retrieve selected transaction records that match parameters of a query, where each of the selected transaction records includes a line field, documenting a first telephone number from which a call originates; a number field, documenting a second telephone number to which said call is placed; a place field, documenting a location corresponding to said number field; and a cost field,
20 documenting a cost of a corresponding call event. A user account bill is made up of transaction records corresponding to a particular account number. The web server is coupled to the billing server. The web server provides the query in response to a user command received from a data network, and transmits the selected transaction records to a user over the data network for viewing via a web browser.

25 Another advantage of the present invention is that a user does not have to wait for a monthly bill to arrive in order to scrutinize his/her telecommunications account.

A further object of the invention is to provide an online billing apparatus that allows a user to search a consolidated account and to view individual telecommunications transaction records associated with the search.

5 In a further aspect, it is a feature of the present invention to an apparatus for accessing selected telecommunications records over the internet from a user computer that is executing a web browser application. The apparatus has a billing server and a web server. The billing server maintains telecommunications records, and provides the selected telecommunications records in response to a user request. The billing server includes data base logic, maintenance logic, and query logic. The data base logic stores
10 the telecommunications records, where each of the telecommunications records documents a specific telecommunications event, and where particular ones of the telecommunications records corresponding to a particular user account number are periodically processed to generate an account bill. The maintenance logic, provides the data base logic with a new telecommunications record corresponding to a new
15 telecommunications event. The query logic searches the telecommunications records in accordance with parameters prescribed by the user request, and retrieves the selected telecommunications records. The web server is coupled to the billing server. The web server receives the user request over the internet, and provides the selected telecommunications records to the user computer over the internet.

20 A further advantage of the present invention is that a user does not require special software applications to view detailed telecommunications charges over the internet.

Yet another object of the present invention is to provide a method for displaying, searching, and monitoring individual transactions in a consolidated telecommunications account via a thin web client interface.

25 In yet another aspect, it is a feature of the present invention to provide a method for providing access to telecommunications billing records in a billing computer over the internet, the access being obtained via a remote computer that is executing a thin web client application. The method includes maintaining the telecommunications billing records in a data base, the telecommunications billing records documenting individual

telecommunication events, each of the telecommunications billing records being an item of a periodic telephone bill; querying the data base in accordance with parameters provided by a completed search parameter entry web page; and transmitting a search results web page to display the telecommunications billing records on the remote
5 computer.

Yet another advantage of the present invention is that a subscriber can detect unauthorized charge patterns before excessive charges are accumulated.

In yet another aspect, it is a feature of the present invention to provide a method for providing a user with detailed long distance telephonic transaction billing information via a thin web client. The method includes providing a data server, coupled to local
10 telephone switches, for tracking long distance telephone transactions and associated costs for a plurality of telephone numbers; providing a web server, coupled to the data server, for presenting to the user the detailed long distance telephonic transaction information; and providing the user with a customizable event monitor, coupled to the web server and
15 to the data server, the event monitor for alerting the user when telephone transactions meet a specified criteria.

It is a further feature of the present invention to provide a long distance transaction event monitor, coupled to a telephone network, for alerting a user when specified alert criteria relating to telephony transactions have been met. The event monitor has a web interface,
20 query logic, and an event monitor. The web interface allows a user to specify the alert criteria. The query logic is coupled to the web interface. The query logic causes the specified alert criteria to query the telephony transactions, where the telephony transactions include information corresponding to elements of a periodically generated bill. The event monitor is coupled to the query logic and generates alert messages to the
25 user when the query logic determines that the specified alert criteria is met by the telephony transactions.--

In the Claims:

Kindly amend claims 1, 3, 5, 11, 14, 23, 30-31, 36, and 39 as follows: